## TROUBLESHOOTING

1. *LED Power indicator is not illuminated:* Make sure the 15V AC power supply (included) is plugged into a "live" 120 V outlet. Also, check to make sure that the 15V AC power supply's plug is seated correctly in the power jack of the AVDA-3. If the LED still fails to illuminate, use a voltmeter to measure the 15V AC plug and verify proper voltage. Replace the adapter if necessary. If voltage is correct, replace the AVDA-3.

2. *LED power indicator is illuminated but there is no picture or sound:* Verify proper connection of input and output cables. Test the source component for proper operation.

3. Audio signal exhibits an audible low frequency hum: Hum is most commonly caused by what is termed a "ground loop". Ground loops cause a constant and audible 60 Hz hum on the audio signal. This problem occurs when the ground potential of a particular connected component in the system differs from that of any other connected component. It is most commonly caused by incoming Cable TV feeds or connected components powered by separate AC power circuits. Correcting the ground potential difference at its source is always the best (but not always the easiest) way to correct a ground loop. Using signal isolation transformers offers an easier (but perhaps more costly solution) to this problem.

4. *Picture has horizontal bar that moves up or down vertically:* This is the effect a ground loop has on a video signal. See Troubleshooting #3 for details on ground loops.

5. *Picture and/or sound quality is distorted or dim compared to the original source signal:* This is most likely due to signal loss on the audio or video cables connecting the components, especially if they are longer than 15 ft. Verify proper connection and operation of cables and, if necessary, bench test the AVDA-3 with short cables to verify normal operation. Replace any long runs of cable causing signal loss with upgraded cable.

## SPECIFICATIONS

AUDIO	
nput impedance	100k
Output Impedance	ohm
Frequency Response	OKHz
Signal to Noise Ratio	1 vol
Crosstalk	I KH2
Total Harmonic Distortion0.003% 20Hz to 20	) KH2
Maximum Signal Input	RMS
Output GainL	JNIT

#### VIDEO

Video BandwidthDC to 7MHz
Maximum Input Signal2 volts peak to peak
Input Impedance
Output Impedance
Output GainUNITY
Power Requirements

ESD Protection ......meets IEC 1000-4-2 level 4



**Niles Audio Corporation** 

### www.nilesaudio.com

12331 S.W. 130 Street Miami, Florida, 33186 Tel: (305) 238-4373 Fax: (305) 238-0185 ©1999 Niles Audio Corporation. All rights reserved. Niles, the Niles logo and Blending High Fidelity and Architecture are registered trademarks of Niles Audio Corporation. Because we strive to improve our products, Niles reserves the right to change product specifications without notice. The technical and other information contained herein is not intended to set forth all technical and other specifications of Niles products. Additional information can be obtained on-line at www.nilesaudio.com or by calling Niles at 1-800-289-4434. Printed in USA 10/99 DS00256A

# INSTALLATION & OPERATION GUIDE

AVDA-3

Audio/Video Distribution Amplifier



## INTRODUCTION

The Niles AVDA-3 is a source-level audio and base-band video distribution amplifier. It incorporates an audio input (right and left) and a video input, which are actively distributed to three audio/video outputs. It is especially useful when connecting an audio/video source component to multiple zone amplifiers and/or RF modulators.

### FEATURES AND BENEFITS

- IC operational amplifiers for clear, stable video images and smooth, accurate sound.
- Gold plated RCA connectors for reliable performance.
- Audio/video cascade outputs feature with automatic video impedance matching for simple system expansion and optimal picture quality.
- Space saving, inline power adapter for cleaner installations.
- Ideal for residential and commercial installations.
- 100% factory tested.
- Limited two year parts and labor warranty.
- Proudly made in the U.S.A.



## INSTALLATION CONSIDERATIONS

## Type of Cable

The AVDA-3 performs best when using shielded audio and 75 ohm coaxial video cable. Use low capacitance audio/video cables for runs that exceed 15 ft. to minimize signal loss. Wire runs greater than 50 ft. are recommended only with cable that has been specifically designed for such applications. Contact your cable manufacturer for a specific cable recommendation when wire runs exceed 50 ft.

### INSTALLATION LOCATION

The AVDA-3 has been designed for both shelf and wall mounted installations. Mounting flanges are provided for wall mounting while rubber feet enable it to be placed securely on a shelf. Avoid placement near potential sources of electrical or radio interference such as lighting controls and high voltage appliances.

### INSTALLATION

## Mounting the AVDA-3

Once you have decided on the ideal location for the AVDA-3, make sure that the AC power supply and all signal cables are disconnected while mounting. It can be either mounted on a wall using screws or placed on shelf using the included adhesive rubber feet (See Figure 1).

## Making the Connections

Once the AVDA-3 is securely mounted follow the steps listed below.

- 1. Connect the distributed source components A/V output signal cables to the RCA input connectors (Laudio, Raudio, and video) (See Figure 2).
- 2. Connect the AVDA-3's output RCA connectors to the signal cables leading to the source signals destination (i.e., the A/V input of an AM/FM receiver, RF modulator or television etc.) (See Figure 2).

0 0 0 0 0 15V A0 6 **W**NILES





Figure 1 The AVDA-3 can be either mounted on a wall (A) using screws or placed on shelf using the included adhesive rubber feet (B).

- 3. Connect the included AC power adapter's voltage output plug into the AVDA-3 and then plug its AC power cord into an unswitched AC outlet.
- 4. The power LED should be lit solid to indicate that the AVDA-3 is receiving power and operating normally.

Note: If your system only requires either "audio only" or "video only" distribution, the AVDA-3 can safely operate with either its audio or its video sections unused. Termination is not required.

### SYSTEM EXPANSION

The AVDA-3 provides a Cascade Out connection for both audio and video. It enables the connection of additional AVDA-3's for further distribution of the connected A/V source component. As many as four AVDA-3's can be connected together using this feature. Follow the steps listed below to utilize the Cascade Output feature.



- 1. Connect the first AVDA-3 as previously described in Making the Connections steps 1 and 2.
- 2. Connect the Cascade Output connectors of the first AVDA-3 to the RCA input connectors (left audio, right audio and video) of the additional AVDA-3 (See Figure 3).
- 3. Repeat step 2 using the Cascade Output of the additional AVDA-3's to expand to a maximum of four.
- 4. Connect the included AC power adapter's voltage output plugs into the AVDA-3's and then plug their AC power cords into unswitched AC outlets.
- 5. The AVDA-3's power LED's should be lit solid to indicate that they are receiving power and operating normally.



### Figure 3

Typical installation of a two or more AVDA-3s using the "Cascade Output" to provide signal to more than three components.

А